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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,298	03/26/1999	GEORGE E. CARTER	99P7519US	3318

7590 10/09/2002

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

ARANI, TAGHI T

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 10/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/277,298

Applicant(s)

CARTER, GEORGE E.

Examiner

TAGHI ARANI

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 21-31 is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 3, 8, 9, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Satio et al, US Pat. No. 6, 125,186, filed July 1997.

Satio is directed to an encryption communication method and system in which encrypted data are transmitted between a first terminal and a second terminal without having to preinstall the same encryption program in them. Col. 1, lines 45-55.

In an exemplary embodiment, Satio teaches the case in which the encrypted communication is used in an electronic conferencing system (i.e. computer telephony), see col. 16, lines 19-52.

As per claims 8, Satio teaches that a trusted agent for the purpose of encryption processing is installed in the sending terminal (i.e. a first computer). Before transmitting data, the sending terminal sends an agent (or mobile code) having the same function as the installed agent to the receiving terminal (i.e. a second computer). When the data are transferred, the data are encrypted using the agent in the first computer, and decrypted in the receiving computer (i.e. a second computer) using the mobile code that was sent by the first computer, see col. 3, lines 7-33. That is a security algorithm is inserted within the communication path, see Fig. 1, numeral element 18.

Satio further discloses application programs (i.e. telephony clients) for telephone, television, conference, video transmission, etc. which performs processing that accompanies sending data to and receiving data from the client, see col. 3, lines 39-50, see also Fig. 1, numeral elements 13 and 16.

As per claim 1, Satio discloses corresponding storage device (i.e. a computer –readable medium) which stores programs, data, etc., see col. 3, lines 57-62, see also Fig. 2.

Referring to claims 2 and 9, Satio discloses that the trusted agent consists of an application interface section and a cryptographic processing section. Satio further teaches that another function that application interface section has is to absorb differences due to different operating systems when API depends on the operating system, see col. 4, lines 54-65, col. 16, lines . That is, the trusted agent allows that the first application program (i.e. first telephony client) to be different from the second application program (i.e. a second telephony client).

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Referring to claim 3, and 10, Satio teaches that the trusted agent can be realized as a kernel module of the operating system, and to be incorporated into the OS as necessary, see col. 17, lines 35-40, see also Fig. 22B.

As per claim 11, Satio teaches a CPU which loads programs from the storage device of the first computer into the memory and executes them, see col. 4, lines 3-10.

As per claim 6, Satio teaches that the cryptographic processing can be employed in operating system kernel. That is, the security mechanism is not visible to the user (i.e. is not implemented in the user mode).

Satio further teaches that when the trusted agents prestored in the storage medium of the first computer is loaded into the memory an encrypted communication starts, see col. 4, lines 12-18.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satio as applied to claim 1 above, and further in view of Crick et al, US. Pat. No. 5,675,793, issued Oct. 1997.

As per claims 4, Satio is silent on inserting the security algorithm between the I/O supervisor and a sound class driver.

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However, Crick discloses a computer system with a software system having a layered architecture, see col. 2, lines 58-67.

In Crick's computer system, computer programs in the higher layers request services of the computer programs in the lower layers, see col. 3, lines 4-16.

In doing so, an I/O supervisor passes the request to a chain of device drivers (such as sound class drivers) by invoking the component device drivers and the requested data is finally passed to the application program requesting the service, see col. 3, lines 17-44.

Crick further discloses that component device drivers may in between encrypt and decrypt (i.e. insert a security mechanism) the requested data, see col. 3, lines 31-33.

It would have been obvious to one ordinary skill in the art to employ the layered software architecture of crick into that of Satio to be able to develop component device drivers (such as Satio's trusted agent) independent of one another, see col. 3, lines 45-57.

As per claim 5, Satio teaches that the trusted agent has cryptographic processing units to encrypt data by different method. Satio further teaches a an encryption method selection unit which selects one of the cryptographic processing units in accordance with an instruction from the encryption method selection control unit, see col. 6, lines 10-25.

Satio is silent on selecting an algorithm from a group consisting of an IDEA, a DES, a GOST, an RC5, and a SEAL algorithm.

The examiner asserts that DES, IDEA, GOST, RC5 and SEAL algorithms are industry standard block cipher algorithms used in various applications where a balance on proccessiong speed and the security level is required.

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It would have been obvious to one ordinary skill in the art to adapt the encryption method selection unit of Satio to select one of DES, IDEA, GOST, RC5 and the SEAL algorithm which most suits the security level and the processing speed required .

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satio as applied to claim 1 above, and further in view of Kavsan, US pat. No. 6,412,069, filed Sep. 1998.

Kavsan is directed to a cryptographic service software which is compatible and communicates with a standard operating system computer. Kavsan's cryptographic service software is situated in kernel space of the operating system, see col. 2, lines 50-67.

Kavsan further teaches that the cryptographic service software is capable of encrypting hard drive data and IP packet at the driver level of the personal computer. That is, the Kavsan's cryptographic service software is independent of higher level application programs (i.e. telephony clients).

Claim 12 recites all limitations of claims 1-4, it is rejected for the same reasons provided in the rejection of claims 1-4.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Chapp et al, US Pat. No. 2002/0087761 issued Jul. 2002.

Chapp is directed to a video conferencing system adapted for communicating source audio and video signals over a communication channel, and receiving remote audio and video signals transmitted from a remote conferencing site.

In Chapp's teleconferencing system source audio and video signals are received by an input interface comprising appropriate connectors. The input interface receives source video and audio signals and are transmitted to the processors of local video and audio boards, see pg. 4, paragraph 42.

Chapp further teaches that processors of the video and audio boards comprise compression and decompression chips (i.e. CODEC chips for formatting the signals) that encode and decode audio and video signals in accordance with internationally recognized video conferencing standard such as H.320 and audio compression standards G.711, G.712, G.728 etc. see pg. 5, paragraph 48.

Chapp further discloses that the user of video and audio signals has an option to encrypt/ and to compress the signals prior to transmission, see pg. 10, paragraph 85.

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Then the video and audio signals are compressed and transmitted (i.e. outputted) over a communication channel, see pg. 5 paragraph 44.

Allowable Subject Matter

Claims 15-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21-31 are allowed over prior art.

Conclusion

11. Any inquiry concerning this communication or earlier communications from examiner should be directed to Taghi Arani, whose telephone number is (703) 305-4274. The examiner can normally be reached Monday through Friday from 7:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached at (703) 305-9711. The Fax numbers for the organization where this application is assigned are:

After-final (703) 746-7238

Official (703) 746-7239

Non-Official/Draft (703) 746-7240

Taghi Arani

Patent Examiner

August 6, 2002



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